

ANNUAL OPERATIONS AND PROGRESS REPORT

From Month/Year 1/86
to Month/Year 12/86

(To be submitted for each mining operation at the end of each calendar year to the Division at this address:)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
(801) 538-5340

OPERATOR: McFarland and Hullinger MINE NAME: Crystal Lime Quarry

ADDRESS: P. O. Box 238, Tooele, Utah 84074

PERMIT NUMBER AND DATE OF PERMIT: ACT/045/010

REPRESENTATIVE: Sid K. Hullinger

SECTION(S): 7 - 12 TOWNSHIP(S): 6 South RANGE(S): 3 & 4 West, SLBM

MINERAL(S) MINED: Limestone (none mined since 1982)

STATE AND/OR FEDERAL MINERAL LEASE NUMBERS: _____

SPECIAL USE PERMITS AND/OR RIGHTS-OF-WAY: No

Section 40-8-15 and Rule M-8 of the Utah Mined Land Reclamation Act, requires each operator to include with this report an up-dated map and plan prepared in accordance with Rule M-3, as outlined in the requirements for annual report maps in Appendix I, providing a detailed status of all mining and reclamation activities which have occurred during the past year.

The report should include:

MINING:

(a) Tabulation of acreage disturbed (by pits, roads, facilities, etc.) during the report period with illustration on a current map.

JAN 15 1987

DIVISION OF
September 11, 1986 OIL, GAS & MINES

TO: File

FROM: Lynn Kunzler, Reclamation Biologist *Lynn*

RE: Site Visit to Crystal Mine, ACT/045/010, Tooele County, Utah

On August 27, 1986, Sue Linner and Lynn Kunzler met on site with Gary McFarland to review areas of poor revegetation success that will require additional seeding.

Since July 30, 1986 when the area had been originally sampled for bond release, several rain storms had occurred. The vegetation had responded to this additional moisture with significant increase in cover. The area was again examined and it was determined that only two acres would need to be seeded, 1.5 acres on the lower area and 0.5 acres on the upper area. These areas should be seeded late fall, 1986 with the following seed mix:

Russian wild rye
Paint Desert

<u>Species</u>	<u>Rate*</u>
<u>Agropyron spicatum</u>	<i>Increase</i> 3.0
Bluebunch wheatgrass	
<u>Agropyron smithii</u>	<i>Bg 2570</i> 3.0
Western wheatgrass	
<u>Elymus cinereus</u>	4.0
Great Basin wildrye	
<u>Sporobolus cryptandrus</u>	.25
Sand dropseed	
<u>Linum lewisii</u>	1.0
Lewis flax	
<u>Melilotus officinalis</u>	1.5
Yellow sweetclover	
<u>Penstemon palmeri</u>	.5
Palmer penstemon	
<u>Atriplex canescens</u>	2.0
Fourwing saltbush	
<u>Chrysothamnus nauseosus</u>	.5
Whitestem rubber rabbitbrush	
TOTAL	15.75 lbs.

* Rate is pounds Pure Live Seed for broadcast seeding. Areas to be reseeded should be ripped or disced 4" - 8" deep immediately prior to seeding. After seeding, crimp 1 ton of hay mulch/acre into soil.

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Memo to File
ACT/045/010
September 11, 1986

Five transects were sampled in the adjacent undisturbed vegetation to establish the success standard. Net vegetation cover (no weed species counted) averaged 28% with a standard deviation of 2.83. Sample adequacy exceeded the 90% confidence level with a 10% change in the mean.

As per recommendations made after the July 30, 1986 visit. Attached is a bond calculation for the two acres which does not meet the revegetation success standard. As discussed with Sid Hullinger and Gary McFarland, when bond for the two acres is posted, the Division can release the Certificate of Deposit.

jvb
Attachment
cc: Sid Hullinger
Sue Linner
0308R-29

CRYSTAL MINE RECLAMATION BOND ADJUSTMENT 9/86 ACT/045/010 - JRH

ACTIVITY	QUANTITY	COST /UNIT	TOTAL COST
TOPSOIL SCARIFICATION:	2.00	\$45.00 /ACRE	\$90.00
TOTAL AREA TO BE RECLAIMED:	2.00	ACRES	
SEED BED PREPARATION:	2.00	\$25.00 /ACRE	\$50.00
BROADCAST SEEDING:	2.00	\$65.00 /ACRE	\$130.00
BROADCAST SEEDING (By Hand):	2.00	\$120.00 /ACRE	\$240.00
SEED MIX:	2.00	\$140.00 /ACRE	\$280.00
FERTILIZER:	2.00	\$45.00 /ACRE	\$90.00
MULCH:			
Native Hay	2.00	\$325.00 /ACRE	\$650.00
SUBTOTAL			\$1,530.00
10% CONTINGENCY COSTS			\$153.00
TOTAL IN 1986 DOLLARS			\$1,683.00
ESCALATION 3 YEARS @1.62%/YR (TOTAL X 0.0494)			\$83.13
TOTAL WITH ESCALATION (1989 DOLLARS)			\$1,766.13
TOTAL BOND AMOUNT ROUNDED TO NEAREST \$100			\$1,800.00

F. G. McFARLAND
TOOELE, UTAH
Phone - Tooele 882-1243

S. R. HULLINGER
TOOELE, UTAH
Phone - Tooele 882-1344

McFARLAND AND HULLINGER

MINING • ORE HAULING • CONTRACTING

PHONE: TOOELE (801) 882-0103

SALT LAKE CITY: (801) 363-1683

P.O. BOX 238

TOOELE, UTAH 84074

ACT/645/010

JAN 15 1987

DIVISION OF
OIL, GAS & MINING

January 14, 1987

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Sirs:

We completed only the first page of the report.
The Crystal Mine was reclaimed in 1983. It was inspected
by you in 1986, and your report is attached.

McFarland and Hullinger completed the reseeding
as your letter recommended, and the bond was reduced from
\$17,000.00 to \$1,800.00.

This was the only activity during 1986.

Yours very truly,



Sid K. Hullinger

skh/bb